ADA 273 965

A TEST OF THE THEORY OF REASONED ACTION AT THE GROUP LEVEL OF ANALYSIS

THESIS

Presented to the Faculty of the School of Logistics
and Acquisition Management
of the Air Force Institute of Technology
Air Education and Training Command
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management

Thomas A. Fitch

Captain, USAF

Edward A. McCarty

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ABSTRACT

A vast array of studies exist which have sought to explore the relationships between behavioral intentions, job satisfaction, turnover and performance at the individual level of analysis. Recent efforts to move to the group level of analysis have shown some promise, but few exist. The crux of the issue under consideration here was whether or not there was utility in treating attitude-intention-behavior linkages as group level phenomena. Both Schneider (1987) and George (1990) contend that, while individual analysis certainly cannot be discounted as a means of understanding behavior, there is also value in examining group-level phenomena.

The purpose of this research was to test the generalizability of Fishbein and Ajzen's (1975) model to the group level of analysis by assessing the pattern of relationships among attitudinal, intentional, and behavioral variables. The objective of the project was to determine whether or not the basic assumptions of the theory held at the group level of analysis.

A TEST OF THE THEORY OF REASONED ACTION AT THE GROUP LEVEL OF ANALYSIS

I. INTRODUCTION

It has often been theorized that behavior may be predicted through analysis of behavioral intentions (Doran, 1991). One of the prominent theories on the subject is the theory of reasoned action which was proposed by Fishbein and Ajzen (1975). The primary theme of the theory of reasoned action is that attitudes follow from beliefs people hold about the object of the attitudes (Ajzen, 1988). The theory also contends that intentions and actions follow reasonably from attitudes. The importance of this theory and level of acceptance accorded it are clearly evidenced by the number of models of organizational behavior which follow from it (Doran, 1991). For example, Doran cites a study by Mobley, Griffith, Hand and Meglino (1979) which proposed that intent to quit was the antecedent of actual turnover (Doran, 1991). The Mobley study further concluded that job satisfaction was a primary determinant of the aforementioned intention (Mobley et al., 1979).

The combined utility of attitude and behavioral intention was examined in the current research. Furthermore, the generalizability of the theory of reasoned action to the aggregate group level of analysis was examined.

Purpose

The purpose of this research was to test the generalizability of Fishbein and Ajzen's (1975) model to the group level of analysis by assessing the pattern of relationships among attitudinal, intentional, and behavioral variables. The objective of the project was to determine whether or not the basic assumptions of the theory held at the group level of analysis.

Investigative Questions

This research tested the theory of reasoned action at the group level of analysis. The study addressed the following questions:

- 1. Does aggregate group level job satisfaction influence aggregate intent to quit?
- 2. Does aggregate group level intention to quit influence aggregate turnover criteria?
- 3. Does aggregate group level job satisfaction influence aggregate intent to excel?
- 4. Does aggregate group level intent to excel influence group performance?

Hypotheses

In sum, we hypothesized that:

- H1) Job satisfaction and behavioral intentions would be significantly correlated.
- H2) Intent to quit and turnover would be significantly correlated.

H3) Intent to excel and performance would be significantly correlated.

Scope/Limitations

This project consists of a comprehensive review of literature and aggregation and analysis of data collected via a survey instrument and personnel records. The literature review lays the groundwork for the analysis. Subjects covered include job satisfaction, and in particular, links between job satisfaction and performance (Petty, McGee, & Cavender, 1984), behavioral intentions and turnover, and job performance. Behavioral intentions are defined and discussed, but the discussion is limited to intention to quit/stay and intention to excel. Finally, the more general topics of performance and turnover are discussed as they apply within the framework of this project.

Key Terms

As an introduction, there are a number of key terms which require definition. The first of these is the concept of attitudes. In general, attitudes can be considered to be "mental states of readiness for need arousal" (Gibson, Ivancevich, and Donnelly ,1991). Attitudes are determinants of behavior because they are connected to different parts of a person's personality. Specifically, they are linked to perception, personality and motivation (Gibson et al., 1991). The attitude variable of interest in this research was job satisfaction.

Job satisfaction is an attitude individuals have toward their jobs. It results from their perception of their jobs, and is based on number of different aspects of the work environment (Harwood & Rice, 1992). A key component of attitude is behavior. Consisting of a person's tendency to act toward someone or something in a particular manner, these overt actions may be measured or assessed to determine the behavioral component of attitude (Lyne, 1989). In the current instance the behaviors of interest were performance and turnover. The term performance in its general form simply refers to the attainment of goals by persons or groups. Its relationship to job satisfaction is discussed in detail in the review of literature.

II. LITERATURE REVIEW

The following review of literature summarizes current thinking and findings on Fishbein and Ajzen's theory of reasoned action, behavioral intention to quit, turnover, and the job satisfaction-performance relationship.

The Theory of Reasoned Action

According to a meta-analysis of research on consumer intentions performed by Sheppard, Hartwick and Warshaw (1988), the predictive utility of Fishbein and Ajzen's model is quite good. The authors hypothesized that model linkages would receive strong support, specifically predicting that there would be a strong relationship between individuals' intentions and their performance. Additionally, the authors hypothesized that a significant and substantial relationship would exist between individuals' attitudes and subjective norms and their intentions (Sheppard, et al.,1988).

The meta-analysis produced a frequency-weighted average correlation summarizing intention-performance relationships of 0.53. This statistic was based on 87 separate studies with a total sample of 11,566 respondents, and the correlation was significant beyond the .01 level. Additionally, the analysis produced a correlation summarizing attitude-subjective norm relationships of 0.66. The correlation was based on the same 87 separate studies, including

12,624 respondents. The results were significant at the .001 level (Sheppard et al.,1988).

In summary, the meta-analysis provided support for the predictive utility of the Fishbein and Ajzen model (Sheppard et al., 1988).

Fishbein and Ajzen's theory of reasoned action has been useful as a rationale explaining why individuals act out behaviors as they do. The attitude—intention—behavior linkage suggested by the model has proven robust when tested at the individual level of analysis, but extrapolating this model to the group level of analysis represents a foray into uncharted territory (Doran, 1991).

Withdrawal Behaviors

Current thinking holds that the impact of withdrawal behavior on organizations should be investigated (Martin, 1981). Research, it has been proposed, should do more than investigate whether good performers are the ones leaving. Investigation is needed into the impact of different forms of withdrawal on a range of organizational properties (Price, 1977). The key withdrawal behavior examined within the context of this paper is voluntary turnover.

Turnover. The term turnover in the context of this paper refers to "the cessation of membership in an organization by a member who received monetary compensation from the organization." (Mobley, 1979, p. 106). Furthermore, any reference to the term turnover implicitly refers to voluntary turnover unless explicitly stated. Examination of this topic has considerable

importance, particularly in light of current organizational changes and fiscal constraints affecting the Department of Defense.

The U.S. Department of Defense has a number of specific reasons to be interested in retaining quality personnel. In his 1988 thesis, Kline (1988) reports that hiring and training costs and the need to compete for quality people are two reasons in particular which will require the DoD to thoroughly understand employee turnover.

Managers, therefore, continue to be interested in employee turnover, because dysfunctional turnover can be expensive in terms of costs, lost opportunities, and morale (Dalton & Todor, 1982). Specifically, capital investment in employee training is lost when a person leaves; the price of replacing those employees has been estimated at two to five times their monthly salaries (Discenza and Gardner, 1992). Also, the successful execution of business plans may be jeopardized when key individuals are no longer present to implement or carry out strategies. Disruption of performance, social and communication patterns and so forth are additional consequences of turnover (Fitz-enz, 1990). Managers often assume that low turnover is a mark of an effective organization (Wells & Muchinsky, 1985). To conduct a thorough cost/benefit analysis of turnover, the functional perspective must be examined. There has been substantial research into the functionality of turnover. however, the topic is not discussed here because it is irrelevant to the purpose of this study (Dalton and Todor, 1979; Dalton, Todor, and Krackhardt, 1982; Dalton and Todor, 1982; Mobley, 1982; Hollenbeck and Williams, 1986; Teel, 1988).

Significant research in the area of turnover began more than 30 years ago with Brayfield and Crocket (1955), and Vroom (1964). Early work centered on the relationship between job satisfaction and turnover (Brayfield & Crocket, 1955; Vroom, 1964; Locke, 1968; Lyons, 1971; Porter and Steers, 1973). However, the mass of turnover research did not occur until after 1974, partly due to theoretical arguments linking intentions to overt behavior (Steel and Ovalle, 1984). Although subsequent studies have failed to show that satisfaction is a strong predictor of performance, it has been shown to be a reliable predictor of turnover (Hom, Katerberg, and Hulin, 1979; Mobley, 1982).

Volumes of literature have been published addressing a variety of perspectives on turnover because it significantly affects organizations. This portion of the literature review examines the relationship between behavioral intentions and turnover. Steel and Ovalle's (1984) literature review and comprehensive meta-analysis serves as a basis for this review.

Of the independent variables known to effect turnover, intentions are most commonly cited as the best predictor of turnover (Steel and Ovalle, 1984). Numerous authors use the intent-turnover relationship as a cornerstone of their models. For example, Mobley's heuristic process model uses intention to stay/quit as the final step in the decision making process (Mobley, 1979). Mowday, Porter, and Steers' (1982) model of voluntary turnover "depicts the desire/intent to stay or leave as mediating the relationship between affective mechanisms and their behavioral outgrowths" (Mowday, Porter, and Steers, 1982, p. 124). Bluedorn's (1982) Unified Model, which

synthesizes three existing models, attempts to provide a better understanding of turnover by analyzing job satisfaction, organizational commitment, and intent to leave. Although models may differ in their design and philosophical underpinnings (psychological or sociological), intentions are generally considered the final step of the decision making process (Steel and Ovalle, 1984).

Steel and Ovalle's (1984) study found that intent to remain and turnover are significantly correlated (weighted mean r = .45). Their meta-analysis used 34 intent-turnover studies which were conducted between 1963 and 1983 for a combined sample size of 83,522. Based on Rosenthal's (1979) method of calculating the number of studies it would take to disprove a meta-analytic finding, 73,415 unpublished studies containing null conclusions would be required to undermine Steel and Ovalle's (1984) findings.

Steel and Ovalle's (1984) research provides strong evidence that behavioral intentions are an antecedent of employee turnover. This finding is consistent with the predictions of many turnover theories. Although laboratory experiments have shown correlations between intentions and behavior of up to r = .80, the results of Steel and Ovalle's field study are nonetheless impressive (Fishbein and Ajzen, 1975). Intention-behavior relationships from field studies have often tended to be weaker than comparable intent-behavior relationships observed in laboratory experiments (Steel and Ovalle, 1984). Situational and contextual factors inherent in field studies, in comparison to the relatively neutral conditions found in laboratory experiments, are generally accepted as the reasons for the disparities in average correlations (Neverse 1974; Fishbein and Ajzen, 1975).

Behavioral Intention to Excel

It is clear that within the framework of Fishbein and Ajzen's theory, behavioral intent serves as a key antecedent of action(behavior). In the case of a quit/stay decision, intent to quit/stay has a well-documented relationship with turnover behavior (Sheppard et al., 1988). The same cannot be said, however, for an intentional variable designed to predict task performance. To date there have been few attempts to develop a performance-oriented analog of intention to quit. The proposal here was that a behavioral intention to excel might exist, which could be a determinant of performance. Similar in effect to the well-established intent to quit construct, intent to excel could be a predictor of behavior (performance) at the individual and group levels of analysis. As such, intent to excel could impact work group performance.

Behavioral intent to excel was employed as an exploratory measure in this study. Its inclusion was designed to determine if, first of all, a behavioral intent to excel existed at the group level, and secondly, to explore what, if any, effect that group intent had on aggregate group performance.

lob Satisfaction

The correlation between job satisfaction and turnover is well established, although not particularly strong (Locke, 1975, 1976; Porter and Steers, 1973). Mobley's Intermediate Linkages Model(1979) suggests that dissatisfaction evokes thoughts of quitting, search for alternatives, the evaluation of alternatives, intentions to quit, and, ultimately, turnover. Feedback loops are suggested at each step of the process to head off turnover. A key aspect of the Intermediate Linkages Model is that intention to quit is the variable which precedes turnover (Mobley, 1977).

Job Satisfaction and Performance

As described by Petty et al. in their 1984 meta-analysis, the relationship between job satisfaction and performance is one of the most controversial issues to emerge from decades of research on employee attitudes and employee behavior (Petty et al., 1984).

The analysis by Petty et al. (1984) detailed three major theoretical viewpoints on the subject, as exemplified by papers by Schwab and Cummings (1970) and Nord (1976). The first is the satisfaction-causes-performance (s->p) model, the second is the performance-causes-satisfaction (p->s) model, and the third is that the satisfaction-performance relationship is moderated by other variables (Petty et al., 1984).

Satisfaction-Causes-Performance. The satisfaction-causes-performance viewpoint originates in human relations theory, which has its roots in the Hawthorne studies. Major reviews of the satisfaction-causes-performance literature, however, have produced largely negative results. The first extensive review, published by Brayfield and Crocket (1955), included more than 50 studies and cast serious doubt on the basic assumptions of the satisfaction-causes-performance viewpoint. A similar review conducted by Vroom (1964) examined 20 studies relating satisfaction and performance and found correlations ranging from -.31 to .86, with a median correlation of .14 (Petty et al., 1984).

Performance-Causes-Satisfaction. The second major viewpoint on the job satisfaction-performance relationship reversed the causal direction, proposing a performance-causes satisfaction relationship. The key component of this approach was the assertion by Lawler and Porter (1967) that performance may lead to rewards, and rewards to satisfaction. The inclusion of rewards as an intervening variable was the major departure from the previous approach. This model predicted low but positive statistical relationships between performance and satisfaction (Petty et al., 1984).

Moderating Factors. The final theory on this issue holds that satisfaction and performance are related only under certain circumstances. Due to the consistently low correlations observed during the various studies, theorists speculate that there may be moderating factors at work which affect the proposed relationship between satisfaction and performance. Additionally, advocates of

the moderated relationship view do not assume a unidirectional relationship as do those who hold to the other two theories (Petty et al., 1984).

The results of Petty et al.'s (1984) meta-analysis revealed that individual job satisfaction and job performance were positively correlated. A stronger relationship was observed between overall job satisfaction and job performance for higher level employees. Additionally, a degree of unexplained variance across the studies characterized pay and work satisfaction facets. The results of the study were generally supportive of the performance-causes-satisfaction theory. The researchers concluded, however, that the relationship may well be circular, with performance-causing-satisfaction serving as the first link in the process (Petty et al., 1984).

Attraction-Selection-Attrition Framework

In his 1987 work, Schneider introduced what he termed a "framework for understanding the etiology of organizational behavior" (Schneider, 1987, p. 437). His framework holds that an attraction-selection-attrition (ASA) cycle is at work in organizations, and this ASA framework helps to create an organization that is a function of the people the organization contains.

In his presentation Schneider contends that in order to think about how organizations look, feel, and behave, we must shift our focus from the individual to the organization as the unit of analysis. Schneider's premise is that it is the people behaving within the organization that make organizations what they are (Schneider,

1987). In his description of the ASA framework, Schneider reiterates his argument that the focus, or level, of analysis for his discussion is on the organization, which serves as a location for human activity. The focus is not on the individual. Schneider continues by proposing that we should not be concerned with the differences within an organization, but should instead concentrate on differences between organizations (Schneider, 1987).

A relatively new twist in the study of employee turnover is the focus on group level phenomena. George (1990) discovered that many of the variables correlating with turnover at the individual level of analysis are also correlated at the group level of analysis (George, 1990). A possible explanation for this may be found within Schneider's attraction-selection-attrition framework. He suggests that individuals with like personalities tend to be attracted to, selected by, and retained in a group (Schneider, 1987). A study conducted by George (1990) suggests that there is a strong likelihood (r = .63, p < .01) that personality traits may positively or negatively affect group behavior. This hypothesis is supported in a later study in which group cohesiveness and the leader's positive mood correlated significantly (r = .40 and .32, p < .01) with group behavior (George and Bettenhausen, 1990).

George's Group-Level Phenomena

Building on Schneider's work with the ASA framework at the group level, George (1990) examined personality, affect, and behavior as group-level phenomena. In what she termed a "break from more traditional concerns with situational determinants of job satisfaction or affective reactions," George proposed a different perspective (George, 1990, p. 107).

The thrust of George's (1990) argument was that relations may exist between personality, affect, and behavior at the work group level of analysis in addition to those present at the individual level. The author made it clear that the relationships being hypothesized were not meant to supplant individual-level findings. They were instead intended to add to the body of knowledge which already exists concerning relationships at the individual level by suggesting that relations might also exist at the group level of analysis (George, 1990). While the variables examined by George differ somewhat from those in the current study, the key point once again is level of analysis.

Objective of Current Study

This study attempted to build on previous work by evaluating the predictive utility of the Fishbein and Ajzen theory at the group level of analysis. The key departure here was the move to the group level of analysis. A wealth of information and studies exist on the Theory of Reasoned Action at the individual level of analysis.

The same cannot be said, however, for analysis at the aggregate group level.

The theoretical basis for moving to the group level of analysis for this study was work done by Schneider (1987) and George (1990). In those earlier studies, variables such as personality, affect, and behavior were examined as group-level phenomena. George built on Schneider's attraction-selection-attrition (ASA) framework and the group socialization literature, and proposed that work groups could vary in terms of the manner in which specific behaviors were manifested by group members (George, 1990).

In examining prosocial behavior, for example, George hypothesized that it could be possible to characterize groups in terms of their prosocial orientation. George continues by proposing that a characterization of a group's orientation with respect to a specific construct would define a group climate or culture that promotes the behavior which permeates the group (George, 1990). George (1990) laid more specific groundwork for investigation of turnover at the group level of analysis, suggesting that a relationship existed between the pleasure/pain of remaining a part of a work group and turnover among group members (George, 1990). Describing what amounted to a cost/benefit analysis regarding the value of group membership, George suggested that ambient and discretionary stimuli within groups could be determinants of whether or not members remain in groups (George, 1990).

The crux of the issue under consideration here is whether or not there is utility in treating attitude-intention-behavior linkages as group level phenomena. Both Schneider (1987) and George (1990) contend that, while individual analysis certainly cannot be discounted as a means of understanding behavior, there is also value in examining group-level phenomena. If, for example, managers wish to assess the effects of policy decisions on turnover and performance, then knowledge of these processes as individual-level responses may not be enough. If, as Schneider (1987) and George (1990) propose, the group plays a determining role in the behavioral intentions of individuals, then any information available on "group intentions" would clearly have value.

With Schneider (1987) and George's (1990) work as a foundation, this study sought to investigate behavioral intention to quit and behavioral intention to excel as group-level phenomena. Armed with the theories presented by Schneider and George, we ventured forth to test the theory of reasoned action at the group level of analysis.

III. METHOD

Procedure

The data used in this research were collected as part of a larger study. Data were collected from a group of military and civil service employees of the U.S. federal government. The survey was administered on-site and was totally voluntary. Additionally, confidentiality was ensured through a coding system administered by on-site personnel. Of the total employee population eligible to complete the survey (2450), a total of 1502 (i.e., 61%) persons responded to the initial survey, with 564 of those persons responding to both surveys and providing information applicable to the current study.

Forty-eight percent of the respondents were male and 50 percent were female (2% were indeterminate). The typical respondent was between 31 and 40 years of age. Respondents had typically completed at least some college work, and had been employed by the organization for about five years. The majority of the respondents (98.2%) were civilian, with 1.2% of the remainder being active duty military. The sample can be seen as most representative of Department of Defense civilian employees.

The respondents were sampled from 77 work groups representing most of the approximately 96 work centers constituting the organization. Each case included a code number which identified the work group to which the individual belonged. The aggregation

process keyed on those codes as the means for producing group-level scores for the survey responses.

Survey responses were averaged for each work group to produce a single aggregate score on each variable under study.

Turnover and performance data were also aggregated, but aggregation of this data was performed across time (i.e., April 1986 - September 1987) and across groups.

Actual turnover statistics were obtained from organization records and the monthly unit attrition statistics for each work group were utilized as primary turnover data. The monthly totals were summed to produce a single turnover variable. Performance data were also supplied by the organization on each work group for each month over the period July 1985 to September 1987. No aggregation was required to get these data to the group level, but at the group level the monthly totals were averaged to produce a single group performance score.

Measures

Intent to quit. Intentions to quit were evaluated via survey participants' responses to the statement: 'Within the coming year, if I have my own way:

- 1 = I definitely intend to remain in Federal Service.
- 2 = I probably will remain in Federal Service.
- 3 = I have not decided whether I will remain in Federal Service.
- 4 = I probably will not remain in Federal Service.
- 5 = I <u>definitely intend</u> to leave Federal Service.

Individual scores were aggregated to the group level to produce a single intent to quit score for each work group. Once aggregated, the results produced a sample size of n=77.

Of the predictor variables known to affect turnover, intentions are most commonly cited as the best predictor of turnover (Steel and Ovalle, 1984). Steel and Ovalle's (1984) meta-analysis found that intent to remain and turnover are significantly correlated (weighted mean r = .45). Their review and analysis of 34 intent-turnover studies provides strong evidence that behavioral intentions are an antecedent of employee turnover.

Job satisfaction. The job satisfaction attitude was measured using 21 items from the short form of the Minnesota Satisfaction Questionnaire (Weiss, Dawiss, England & Lofquist, 1967), answered on a five-point scale. The range of possible responses was from: 1-means you are very dissatisfied with this aspect of your job, to 5-means you are very satisfied with this aspect of your job. For statistical analysis, the construct was divided into intrinsic and extrinsic facets of job satisfaction.

The general satisfaction scale of the MSQ is one of the most widely used measures of job satisfaction. The scale has proven successful in assessing satisfaction with a wide range of features within organizations (Roberson, 1990). Termed a "commonly used and well developed" measure of job satisfaction, the MSQ has been employed to test the validity of a number of other questionnaires (Schriesheim, Hinkin & Tetrault, p. 160, 1991). Coefficient alpha(α) for the job satisfaction measure was .91, with n= 71.

Intention to excel. The intent to excel variable was measured through analysis of responses to 17 statements. Respondents were asked to use a seven-point rating scale to indicate how well each item described the goals they had for the coming year. The items dealt with the plans they had for their jobs, for example: I think I will probably wind up being the top performer in my office. Possible responses ranged from: 1 = Definitely not among my work plans, to 7 = Exactly the same as my own work plans. As they read each item, respondents were asked to consider, "Is this a realistic goal for me?" The items were summed to produce a measure of intent to excel, and are provided in detail in the appendix. The intent to excel measure yielded a coefficient alpha(α) of .88 with n=71.

Turnover. Turnover statistics were extracted from organizational records of accessions and separations. The data were kept on a monthly basis and reported by workcenter. The definition of turnover for the purposes of this study was voluntary separation of full time permanent employees. Retirements and dismissals were not counted, nor were extended leaves without pay. Part-time and co-op personnel were excluded. The monthly totals were then summed to produce a turnover score for each work group over the study period. There were 77 work centers with complete turnover data. The minimum turnover experienced in a month by any group was zero and the maximum was five.

Performance. Performance data were based on a rating system developed by the agency. Monthly workcenter ratings were based on a goal system with a score of 100 indicating attainment of internally set goals. Performance scores varied widely from month-to-month and group-to-group, ranging from a low of 36 to a high of 300. Monthly performance figures were averaged to produce a single group performance score. The total of work centers with usable performance criteria was 35. Summary statistics for the variables examined are provided in Table 1.

Table 1
Summary Statistics

| | Mean | Standard Deviation | Variation |
|---------------------------|--------|--------------------|-----------|
| 1. Turnover | 1.90 | 2.67 | 7.16 |
| 2. Intention to Quit | 1.74 | 0.70 | 0.49 |
| 3. Intrinsic Satisfaction | 44.87 | 6.17 | 38.15 |
| 4. Extrinsic Satisfaction | 18.04 | 3.83 | 14.74 |
| 5. Intention to Excel | 63.89 | 7.43 | 55.21 |
| 6. Performance | 105.73 | 15.16 | 229.83 |

IV. RESULTS

Stepwise Procedure

Stepwise regression was used to determine whether or not the model's predictive ability was enhanced by the inclusion of multiple variables. In the case of the turnover construct, the intrinsic and extrinsic components of the job satisfaction construct as well as the intention to quit variable were included in the stepwise procedure.

The performance construct was similarly evaluated through the stepwise procedure and the job satisfaction and intent to excel variables.

Overall Analysis

The correlations (Table 2) produced during the course of this exercise were clearly disappointing. Only the intrinsic job satisfaction-intent to excel relationship showed any significance at or beyond the .05 level, while the next best result was intrinsic job satisfaction and intent to quit, significant at the .10 level. It was interesting to note that even variables which have been shown to have a correlational relationship at the individual level, i.e., intent to quit and turnover, showed no significant relationship here (Steel and Ovalle, 1984). While disappointing, the results were not altogether surprising.

On the performance side, the raw data was adequate as it was possible to get the sample n above 30 groups. The intent to excel

construct had an excellent Cronbach's coefficient alpha(.84) at the individual level, but once again the results at the group level were disappointing. The single significant ($p \le .05$) correlation discovered was produced by this exploratory measure when run with the intrinsic job satisfaction construct.

Overall, however, the poor predictive utility of the independent variables with respect to group-level performance was disappointing. Stepwise regression results (Tables 3 and 4) were simply not significant, with Adjusted R² values of .043 and -.008 for the turnover and performance constructs respectively. The intent to excel variable and the intent to quit variables were not even significant enough to automatically enter the stepwise procedure for the performance and turnover constructs. Transformation of data to reduce skewness and kurtosis was also undertaken, but even though the data was successfully normalized, the correlations were simply no better.

In the final analysis, it was clear that the hypotheses proposed here were simply not supported. No significant correlation was discovered between job satisfaction and behavioral intentions (H1), nor was any significant correlation revealed between intent to quit and turnover (H2). Finally, there was no evidence of significant correlation between intent to excel and performance (H3).

Table 2

Correlations Among Study Variables

| | | 1 | 2 | 3 | 4 | 5 | 6 |
|----|--------------------------------------|----------|-----------|-------------|----------|-----|---|
| 2. | Turnover Intention to quit | 08 | _ | | | | |
| | 3 | 21 | 21** | - | | | |
| | Extrinsic Job Sat Intention to excel | 20 04 | .05 30 | .67 .35* | - .15 | _ | |
| _ | Performance | .25 | .09 | .33 11 | 09 | .05 | - |

^{*}p≤ 0.05

^{**} $p \le 0.10$

Table 3
Stepwise Regression Results for Turnover

| | DF | Sum of | f Squares | Me | an Square | F | | Prob>F |
|--|---|--|--|--------------------------------|---|---------------------|------------------------|-------------------------------------|
| Regression Error Total | 71 | 524.2985 | 1908 | | 0148092 8448618 | 3.21 | | 0.0775 |
| Variable | | ameter mate | Stand Erro | | Type II Sum of Squa | ares | F | Prob>F |
| NTERCEP INTRIN | | 004010 231774 | 2.3326 0.0515 | 66216 2969 | 51.163354 23.7014809 | 31 92 | 6.93 3.21 | 0.0104 0.0775 |
| Rounds on | aan disi | | 1 | | 1 | | | |
| | | QUIT1 End | tered R- | square | = = 0.06979799 an Square | | - • | .16378132 Prob>F |
| Step 2: Va Regression Error | riable (DF) | QUIT1 End Sum of 38.2493 509.7506 | tered R-s f Squares 0045 59955 | square Mea 19.1 | | | - • | |
| Step 2: Va Regression Error Total | riable (DF 2 70 72 Par | Sum of 38.2493 509.7506 548.0000 | tered R-s f Squares 0045 59955 00000 Stand | square Mea 19.1 7.2 | = 0.06979799 an Square 12465023 28215285 Type II | 2 | F 2.63 | Prob>F 0.0795 |
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Table 4
Stepwise Regression Results for Performance

| Step 1: Variable INTRIN Entered R-square = 0. 02946168 C (p) = 0.70239306 | | | | |
|--|---|--|--------------|-------------------------------------|
| otep 1. variable ii | ······································ | Amarc - 01 023 10100 | O (P) | 0 0203000 |
| DF | Sum of Squares | Mean Square | F | Prob>F |
| | 25793.2557933 438171.1960953 663964.4518886 | 225793.25579330 225399.12715440 | 1.00 | 0.3242 |
| Paramet Variable Estimate | | Type II Sum of Squares | F | Prob>F |
| | 684078 978.54569 5223593 22.04297 | | 7.65 1.00 | 0.0092 0.3242 |
| Bounds on condition | on number: 1, | 1 | | |
| Step 2: Variable E | XTRIN Entered R-s | square = 0. 05094214 | C (p) | = 2.00073924 |
| DF | Sum of Squares | Mean Square | F | Prob>F |
| | 90418.7214388 273545.7304497 663964.4518886 | 195209.36071943 227298.30407655 | 0.86 | 0.4332 |
| Paramet Variable Estimate | er Standard Error | Type II Sum of Squares | F | Prob>F |
| INTERCEP 2844.33 INTRIN -36.968 EXTRIN 29.04 | 32 28.2269 | 1853413.0758 389874.3088 164625.4656 | | 15 0.0075 72 0.1996 72 0.4011 |
| Bounds on condition number: 1. 626, 6.504 | | | | |
| No other variable met the 0. 5000 significance level for entry into the model. | | | | |

V. DISCUSSION

The Theory of Reasoned Action was clearly intended for use at the individual level, and the move to the group level was perhaps tenuous. A key difficulty seemed to be in the turnover data, where it was not possible to objectively match individual intentions to quit with actual curnover data. It was known who said they planned to quit, but simply could not be determined if they in fact did so. The problem was then compounded as the data was aggregated to the group level. This factor clearly affected the overall results, as evidenced by the poor correlations between the intent to quit and turnover variables.

The fact that the exploratory measure, intent to excel, produced the single significant (p \le .05) correlation discovered during this exercise was not particularly surprising, as the excel measure sought to describe what could be termed an inner drive on the individuals' part to succeed in their work. If present, that characteristic would intuitively seem to have a connection to an intrinsic satisfaction with the work environment.

A number of reasons might explain the results of the correlational analysis undertaken during this research. While the quantity of data analyzed produced satisfactory sample sizes in each instance, and the data exhibited a good deal of variation across the board (Table 1), it was difficult if not impossible to ensure that scores recorded for individuals were accurately reflected in the aggregate group scores. This was specifically the case for the

turnover data. Additionally, there was no way to determine what other mediating factors may have been at work within any given group. Influences of things such as leaders and leadership styles could have acted as confounds in any or all of the work groups. Finally, the Theory of Reasoned Action simply may not be valid at the group level. The theory has been shown to have adequate predictive utility at the individual level (Sheppard et. al., 1988), but we clearly do not yet understand the dynamics which could be at work at the group level. That is not to say that this exercise calls any of the findings reported by George (1990) or Schneider (1987) into question.

This study was clearly limited by the data examined. Performance measures, for example, were developed and collected by the organization studied. The reliability and validity of those measures was impossible to ascertain. Additionally, the turnover data was clearly suspect. With no way of determining if the survey respondents who said they were likely to leave actually did so, there was no way to determine whether turnover that occurred in a group corresponded to a similar survey response. In sum, this effort has no real implications for either George (1990) or Schneider's (1987) work.

In conclusion, we believe that the move to the group level during this exercise was interesting, though not definitive due at least in part to the limitations on the data utilized. The exercise uncovered a clear difference between relationships that have been clearly significant at the individual level (e.g.; intent to quit and actual turnover; Steel and Ovalle, 1984) and those same

relationships at the aggregate group level of analysis (i. e., no significant correlation at the group level.)

Continued exploration in this vein would be interesting, but only with a much cleaner data set. The intent to excel construct showed some promise, as it produced the only significant correlation (intrinsic job satisfaction and intent to excel) of the exercise. Further exploration of this construct may, indeed, be fruitful. In light of the somewhat suspect nature of the performance data utilized in this effort, an attempt aimed at evaluating this exploratory measure at some future date with cleaner data might prove interesting. Building again from George (1990) and Schneider's (1987) work at the group level and incorporating a behavioral intention to excel would seem to be worthwhile. The value of continued examination of the Theory of Reasoned Action at the group level is not so clear cut, and frankly is not recommended.

APPENDIX

Ouestionnaire

Minnesota Satisfaction Questionnaire (MSQ: Weiss et al., 1967)

How satisfied are you in your present job? Use the following rating scales to indicate your satisfaction.

- 1 means you are very dissatisfied with this aspect of your job
- 2 means you are dissatisfied with this aspect
- 3 means you can't decide if you are satisfied or not with this aspect of your job
- 4 means you are satisfied with this aspect
- 5 means you are very satisfied with this aspect of your job
- 1. Being able to keep busy all the time
- 2. The chance to work alone on the job
- 3. The chance to do different things from time to
- 4. The chance to be "somebody" in the community
- 5. The way my boss handles his or her people
- 6. The competence of my supervisor in making decisions
- 7. Being able to do things that didn't go against my conscience
- 8. The way my job provides for steady employment
- 9. The chance to do things for other people
- 10. The chance to tell people what to do
- 11. The chance to do something that makes use of my abilities

- 12. The way company policies are put into practice
- 13. My pay and the amount of work I do
- 14. The chances for advancement on the job
- 14. The freedom to use my own judgment
- 15. The chance to try my own methods of doing the job
- 16. The working conditions
- 17. The way my co-workers got along with one another
- 18. The praise I get for doing a good job
- 19. The feeling of accomplishment I got from the job
- 20. Enjoying the work itself

Behavioral Intention To Quit

Use the rating scale given below to indicate your plans to either continue in Federal Government service or seek employment outside of the Federal Government.

Within the coming year, if I have my own way:

- 1 = I definitely intend to remain in Federal Service.
- 2 = I probably will remain in Federal Service.
- 3 = I have not decided whether I will remain in Federal Service.
- 4 = I probably will not remain in Federal Service.
- 5 = I <u>definitely intend</u> to leave Federal Service.

Behavioral Intention to Excel

The following items deal with the plans you have for your job and how you will do it. Please indicate how well each item describes the goals and intentions you have for yourself for the coming year. Use the following rating scale to show whether the statements given below reflect your own personal orientation to your job. As you read each item, ask yourself, "Is this a realistic goal for me?"

- 1 = Definite not among my work plans
- 2 = Very unlike my own work plans
- 3 = Somewhat unlike my own work plans
- 4 = Can't decide
- 5 = Somewhat similar to my own work plans
- 6 = Very similar to my own work plans
- 7 = Exactly the same as my own work plans
- 1. I think I will probably wind up being the top performer in my office.
- 2. I'm confident that I will be able to surpass the performance of 90% of my co-workers.
- 3. I intend to produce work that will stand out when it is compared with that of my co-workers.
- 4. I want to receive the recognition from the people I work with that goes along with exceptional performance.
- 5. I will not be satisfied with anything less than superior performance.
- 6. When it comes to doing my job, I will strive to do the very best possible.
- 7. I will outperform most everyone else doing the same type of work.
- 8. Compared to other people I work with, I plan to work hard and be among the top 10% in my office or department.

- 9. I want the amount of work I do to be similar to what others in my office do.
- 10. The quality of my work will deserve special recognition from my supervisor.
- 11. I will avoid putting unnecessary pressure on myself by trying to accomplish too much in my job.
- 12. I won't show off by trying to outdo the people I work with.
- 13. My competitive nature will lead me to strive for excellence in the job I do.

BIBLIOGRAPHY

Ajzen, I. (1988). Attitudes, Personality and Behavior. Chicago: Dorsey.

7

- Ajzen, Icek and Fishbein, Martin (1980). <u>Understanding Attitudes</u> and <u>Predicting Social Behavior</u>, Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Bluedorn, Allen C. (1982). A unified model of turnover from organizations, Human Relations, 35, 135-153.
- Brayfield, A. H. & Crocket, W. H. (1955). Employee attitudes and employee performance. <u>Psychological Bulletin</u>, 52, 396-424.
- Dalton, Dan R, & Todor, William, D. (1979). Turnover turned over: An expanded and positive perspective, <u>Academy of Management</u> Review, 4, 225-235.
- Dalton, Dan R., Todor, William D. & Krackhardt David M. (1982). Turnover overstated: The functional taxonomy, <u>Academy of Management Review</u>, 7, 117-123.
- Dalton, Dan R., & Todor, William D.. (1982). Turnover: A lucrative hard dollar phenomenon, <u>Academy of Management Review</u>, 7, 212-218.
- Discenza, Richard & Gardner, Donald. (1992, Spring). Improving productivity by managing for retention, Information Strategy. The Executives Journal, 8, 34-38.
- Doran, L., Stone, V., Brief, A., Arthur, P., & George, J. (1991).

 Behavioral intentions as predictors of job attitudes: The role of economic choice. <u>Iournal of Applied Psychology</u>, 76, 40-45.
- Fishbein, M. & Ajzen, I. (1975). <u>Belief, attitude, intention, and behavior: An introduction to theory and research.</u> Reading, MA: Addison-Wesley.
- Fitz-enz, Jac. (1990, August). Getting and keeping good employees, Personnel, 67, 25-28.

- George, J. M. (1990). Personality, affect, and behavior in groups. Journal of Applied Psychology, 75, 107-116.
- George, J. M. & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: a group-level analysis in a service context, <u>Journal of Applied Psychology</u>, 75, 698-709.

1

Y

- Gibson, James L. and others. (1988). Organizations: Behavior, Structure, Process. Plano, TX: Business Publication, Inc.
- Harwood, M. & Rice, R. (1992). An examination of referent selection processes underlying job satisfaction, <u>Social Indicators Research</u>, 27, 1-39.
- Hollenbeck, John R. and Williams, Charles R. (1986). Turnover functionality versus turnover frequency: A note on work attitudes and organizational effectiveness, Journal of Applied Psychology, 71, 606-611.
- Hom, Peter W., Katerberg, Ralph Jr., & Hulin, Charles L. (1979). Comparative examination of three approaches to the prediction of turnover, <u>Journal of Applied Psychology</u>, 64, 280-290.
- Kline, T. (1988). An investigation into the predictors of employment intentions for Department of Defense employees, MS Thesis, AFIT/GSM/LSR/88S-14, School of Systems and Logistics, Air Force Institute of Technology(AU), Wright-Patterson AFB OH, (AD-A201 493).
- Lawler, E. & Porter, L. (1967). The effects of performance on job satisfaction. <u>Industrial Relations</u>, 7, 20-28.
- Lock, E. (1968). Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 3, 157-189.
- Locke, E. (1975). Personnel attitudes and motivation. <u>Annual Review of Psychology</u>, 25, 457-480.
- Locke, E. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), Handbook of Industrial and Organizational Psychology. Chicago: Rand McNally.

- Lyne, G. (1989, December). How to measure employee attitudes, Training and Development Journal, 40-43.
- Lyons, T. (1971). Role clarity, need for clarity, satisfaction, tension, and withdrawal, Organizational Behavior and Human Performance, 6, 99-110.
- Martin, T., Price, J., & Mueller, C. (1981). Job performance and turnover. Journal of Applied Psychology, 66, 116-119.
- Milkovich, George T. & Newman, Jerry M. (1987). Compensation (Second Edition). Plano, TX: Business Publications, Inc.
- Mobley, William H., Horner, Stanley O. & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover, <u>Journal of Applied Psychology</u>, 63, 408-414.
- Mobley, W. H. (1979). Intermediate linkages in the relationship between job satisfaction and employee turnover. <u>Journal of Applied Psychology</u>, 273-240.
- Mobley, William H. (1982). Employee Turnover: Causes, Consequences, and Control. Reading, MA: Addison-Wesley Publishing Company.
- Mowday, Richard T., Porter, Lyman W., and Price, Richard M.. (1982). Employee-Organization Linkages; The Psychology of Commitment, Absenteeism, and Turnover. New York: Academic Press.
- Newman, John E. (1974). Predicting absenteeism and turnover: A field comparison of Fishbein's model and traditional job attitude measures, <u>Journal of Applied Psychology</u>, 59, 610-615.
- Nord, W. (1976). Attitudes and performance. In W. R. Nord (Ed.), Concepts and Controversy in Organizational Behavior. Glenview, IL: Scott, Foresman.
- Pettman, Barrie O. (1975). <u>Labour Turnover and Retention</u>. New York: John Wiley and Sons.

- Petty, M. M., McGee, G., Cavender, J. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. Academy of Management Review, 712-721.
- Porter, L. W., & Steers, R. M. (1973). Organizational, work, and personal factors in employee turnover and absenteeism. Psychological Bulletin, 80,151-176.
- Porter, L., Steers, R., Mowday, R., & Boulian, P. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. <u>Journal of Applied Psychology</u>, 59, 603-609.
- Porter, L., Crampton, W., & Smith, F. (1976). Organizational commitment and managerial turnover: A longitudinal study. Organizational Behavior and Human Performance, 15, 87-98.
- Price, J. (1977). The Study of Turnover. Ames, Iowa: The Iowa State University Press.
- Roberson, L. (1990). Prediction of job satisfaction from characteristics of personal work goals. <u>Journal of Organizational</u> Behavior, 11, 29-41.
- Romzek, Barbara S. (1990, May/June). Employee investment and commitment: The ties that bind. <u>Public Administration Review</u>, 50, 374-382.
- Rosenthal, Robert. (1979). The 'File Drawer Problem' and tolerance for null results, Psychological Bulletin, 86, 638-641.
- Schneider, B. (1987). The people make the place. <u>Personnel Psychology</u>, 40, 437-453.
- Schriesheim, C., Hinkin, T. & Tetrault, L. (1991). The discriminant validity of the Leader Reward Punishment Questionnaire (LRPQ) and satisfaction with supervision: A two-sample factor analytic investigation. Journal of Occupational Psychology, 64, 159-166.
- Schwab, D., & Cummings, L. (1970). Theories of performance and satisfaction: A review. Industrial Relations, 9, 408-430.

- Sheppard, B., Hartwick, J., Warshaw, P. (1988). The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. Journal of Consumer Research, 15, 325-343.
- Steel R. P. & Ovalle, N. K. 2d, (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. <u>Journal of Applied Psychology</u>, 69, 673-686.
- Teel, Kenneth S. (1988, November). Is voluntary turnover really voluntary? Personnel Journal, 67, 80-84.
- Vroom, V. H. (1964). Work and motivation. New York: Wiley.
- Waters, L. K., Roach, Darrel, & Waters, C. W. (1976). Estimates of future tenure, satisfaction, and biographical variables as predictors of termination. Personnel Psychology, 29, 57-60.
- Weiss, D. J., Dawiss, R. V., England, G. W. & Lofquist, L. H. (1967).

 Manual for the Minnesota satisfaction questionnaire. Industrial Relations Center, University of Minnesota, Minneapolis.
- Wells, D. & Muchinsky, P. (1985). Performance antecedents of voluntary and involuntary managerial turnover. <u>Journal of Applied Psychology</u>, 70, 2, 329-336.

VITA

1

Captain Thomas A. Fitch was born on November the 9th 1961 in Salem, Ohio. He graduated from West Branch Local High School in 1980. He received a Bachelor of Science degree in Industrial Management from Youngstown State University in 1985 and a commission in the United States Air Force from Officer's Training School in October of that year. Captain Fitch has held assignments at the 23d TFW, England AFB, LA; the 3098th Aviation Depot Squadron, Kirtland AFB, NM; and the 51st Wing, Osan AB, ROK. He entered the Air Force Institute of Technology in May 1992.

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